## Enterprise Java Beans (EJB) Training Curriculum A 5 Day Course

- Enterprise JavaBeans Concepts
  - o Distributed Object Systems: RMI and CORBA
  - Enterprise defined/Goals of EJB
  - o Enterprise JavaBeans versus JavaBeans
  - EJB Architecture
    - Application Server
    - EJB
    - EJB Server
    - EJB Container
    - EJB Clients
    - Interfaces: Home, Remote, and EJBObject
    - Auxiliary Systems: JNDI, JTS
    - Session versus Entity Beans
  - Deploying an EJB
- Session Beans
  - o Concepts
    - Passivation/Activation
    - Stateless versus Stateful
    - Persistent Session Beans
  - Interfaces and Classes
  - o Writing an EJB Client
    - Locating Bean Container
    - Allocating a Bean
    - Interacting with the Bean
    - Disposing of the Bean
  - Packaging and Deploying EJB
    - .ser files
    - Manifest
    - Deployment Descriptors
  - Deploying Enterprise JavaBean Components
- Entity Beans
  - o Introduction to Entity Beans

- Persistence
  - Bean-Managed Persistence
  - Container-Managed Persistence
- o Interfaces and Classes
- o Implementing a Finder Interface
- Calling Entity Beans from Session Beans
- o Container Policies for Providing Synchronization
- Transactions
  - o What are Transactions?
    - What is a distributed transaction?
    - Two-phase Commit
    - Transaction Manager, Monitors, and Services
    - CORBA's OTS
  - Declarative Transactions
  - o Examples of Bean Managed Transactions
  - Client Demarcated Transactions
  - Transaction-Aware Database Drivers
- Advanced Topics
  - EJB-to-CORBA Bindings
  - Servlets and EJBs
  - o Security
    - AccessControlEntry

## **Pre-requisites**

It is recommended that the students are familiar with the following:

- RMI
- CORBA
- JDBC
- Basic Java knowledge including exception handling, threads, full use of all the language constructs, and familiarity with the core Java 1.1 APIs.